



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/743,729

12/24/2003

Ikuko Kobayashi

500.43372X00

9095

24956

7590

04/25/2006

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

HENNING, MATTHEW T

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,729

Applicant(s)

KOBAYASHI ET AL.

Examiner

Matthew T. Henning

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2131

1 This action is in response to the communication filed on 3/22/2006.

2 **DETAILED ACTION**

3 *Continued Examination Under 37 CFR 1.114*

4 A request for continued examination under 37 CFR 1.114, including the fee set forth in
5 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is
6 eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)
7 has been timely paid, the finality of the previous Office action has been withdrawn pursuant to
8 37 CFR 1.114. Applicant's submission filed on 3/22/2006 has been entered.

9 *Response to Arguments*

10 Applicant's arguments with respect to claims 1-17 have been considered but are moot in
11 view of the new ground(s) of rejection.

12 Claims 1-17 have been examined.

13 All objections and rejections not set forth below have been withdrawn.

14 *Claim Rejections - 35 USC § 112*

15 The following is a quotation of the second paragraph of 35 U.S.C. 112:

16 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
17 subject matter which the applicant regards as his invention.

18
19 Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for
20 failing to particularly point out and distinctly claim the subject matter which applicant regards as
21 the invention.

22 Claim 1 recites the limitation "said stream apparatus" in line 3. There is insufficient
23 antecedent basis for this limitation in the claim. For the purposes of searching prior art the
24 examiner will assume that the limitation was meant to read "a stream apparatus".

In the preamble of claim 1, it is unclear whether the second network comprises the limitations to follow, or whether it is the stream server apparatus that comprises the limitations.

In lines 3-7 of claim 1 the following is unclear. It is not clear whether it is the “stream apparatus” or the “first client apparatus” that is connected to the “first network”. It is unclear whether this connection is via a first path alone, or whether it includes “a second client apparatus...without a firewall apparatus”. It is unclear whether a firewall apparatus is part of the second path or whether it is simply part of the system.

Claims 11-13 contain similar issues regarding punctuation and should be appropriately corrected.

Claim 2 recites the limitations "the relevant one of the client apparatuses" and "the another relevant one of the client apparatuses". There is insufficient antecedent basis for these limitations in the claim.

Claims 3-10 and 14-17 are rejected by virtue of their dependency to claims 1, and 11-13.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2131

1 Claims 1-9, and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over
2 Wiegel (US Patent Number 6,484,261), in view of Even et al. (US Patent Application
3 Publication 2004/0114612) hereinafter referred to as Even, as evidenced by Slavin et al. (US
4 Patent Number 6,675,193) hereinafter referred to as Slavin.

5 Regarding claim 1, Wiegel disclosed a stream server apparatus (See Wiegel Fig. 1
6 Element 116 and Col. 10 Lines 44-59) connected to a first network (See Wiegel Fig. 1 Element
7 104) and a second network (See Wiegel Fig. 1 Element 112) comprising: wherein said stream
8 [server] apparatus is connected to a first client apparatus (See Wiegel Fig. 1 Elements 100a –
9 100n) connected to said first network via a first path (See Wiegel Fig. 1 Elements 116, 104, 102,
10 and 100) and a second client apparatus (See Wiegel Fig. 1 Elements 114) connected to said
11 second network via a second path through said first network and a firewall apparatus (See
12 Wiegel Fig. 1 Elements 116, 104, 106, 108, 110, 112, and 114 and Col. 10 Lines 60-66), a first
13 interface which transmits and receives data packets to and from said first client apparatus via the
14 first path (See Wiegel Col. 10 Lines 55-59 and Fig. 1 Elements 116, 104, 102a, and 100a) and
15 being capable of transmitting and receiving control request packets to and from said second
16 client apparatus via said second path (Not prohibited by Wiegel and therefore capable) but
17 Wiegel failed to specifically disclose the first interface transmitting and receiving packets to and
18 from the second client apparatus via said second path. However, it was well known in the art
19 that remote clients could communicate with local servers, and therefore it would have been
20 obvious to the ordinary person skilled in the art to have allowed communications between the
21 local server and the remote end stations 114 of Wiegel. This is evidenced by Slavin in Col. 4

Art Unit: 2131

1 Lines 51-65. As such, Wiegel disclosed that communications with remote end stations 114 occur
2 through the firewall 106 (See Wiegel Col. 10 Line 60 – Col. 11 Line 10).

3 Wiegel further failed to disclose a third path from the server to the second client without
4 a firewall apparatus, a second interface which transmits and receives data packets to and from the
5 second client apparatus via the third path (112) different from the first network; a stream
6 transport management module which specifies said first interface or said second interface in
7 accordance with a network attribute of the first client apparatus or said second client apparatus;
8 and a process module which executes a communication process based on the communication
9 protocols related to said first and second client apparatuses via said first interface or the second
10 interface. Wiegel did however specify that the communications could be UDP (See Wiegel Col.
11 12 Lines 5-15).

12 Even teaches that firewalls block certain types of communications, such as UDP (See
13 Even Paragraphs 0007 - 0009), and that in order to stream UDP messages a multimedia
14 communications control unit can be set up on a separate connection than the firewall in order to
15 bypass the security settings of the firewall (See Even Paragraph 0017) and that in order to set up
16 the connection, the remote client makes requests through the firewall (See Even Paragraph
17 0017), and the data is streamed through the multimedia communications control unit and around
18 the firewall (See Even Paragraph 0017).

19 It would have been obvious to the ordinary person skilled in the art at the time of
20 invention to employ the teachings of Even in the communication system of Wiegel by setting up
21 a separate connection via a multimedia communications control unit to the remote end stations in
22 order to communicate UDP packets. This would have been obvious because the ordinary person

Art Unit: 2131

1 skilled in the art would have been motivated to provide a means for allowing UDP streams, or
2 other communication types blocked by the firewall, to securely bypass the firewall.

3 Regarding claims 2-3, the combination of Wiegel and Even disclosed that the process
4 module executes a stream data distribution process based on a same communication protocol for
5 both the [first] client apparatus[es] belonging to the first network and the another relevant one of
6 the client apparatuses belonging to the second network different from the first network and that
7 the protocol uses UDP (See Wiegel Col. 12 Lines 5-15 and Even Paragraphs 0007-0009).

8 Regarding claim 4, the combination of Wiegel and Even disclosed a control request
9 reception unit which notifies an ID of the interface specified by said stream transport
10 management module to the client apparatuses (See Even Paragraphs 0026 and 0028 - 0030).

11 Regarding claim 5, the combination of Wiegel and Even disclosed that the stream
12 transport management module specifies said first interface, if a client apparatus of the client
13 apparatuses belongs to the second network different from the first network for which the firewall
14 apparatus inhibits illegal accesses and if the communication protocol includes a reception
15 process of a packet on a side of the stream server apparatus (See Even Paragraph 0017 and
16 Wiegel Col. 10 Lines 55-59).

17 Regarding claim 6, the combination of Wiegel and Even disclosed that the stream
18 transport management module specifies said second interface, if a client apparatus of the client
19 apparatuses belongs to the second network different from the first network for which the firewall
20 apparatus inhibits illegal accesses and if the communication protocol does not include a
21 reception process of a packet on a side of the stream server apparatus (See Even Paragraph
22 0017).

1 Regarding claim 7, the combination of Wiegel and Even disclosed that the stream
2 transport management module specifies said second interface, if a client apparatus of the client
3 apparatuses belongs to the second network different from the first network for which the firewall
4 apparatus inhibits illegal accesses and if the communication protocol is a stream data distributing
5 protocol (See Even Col. 0017).

6 Regarding claim 8, the combination of Wiegel and Even disclosed that the stream
7 transport management module specifies said first interface, if a client apparatus of the client
8 apparatuses belongs to the same network as a network to which the stream server apparatus
9 belongs (See Wiegel Col. 10 Lines 55-59).

10 Regarding claim 9, the combination of Wiegel and Even disclosed that said control
11 request reception unit notifies the client apparatuses of the ID of the specified interface, said ID
12 being not a local ID distinguishable by the first network for which the firewall apparatus inhibits
13 illegal accesses but a global ID capable of being translated into a local ID by a network relay
14 apparatus en route to a client apparatus requested stream data distribution (See Even Paragraphs
15 0026 and 0028-0030).

16 Claim 11 is rejected for the same reasons as claim 1 above and further because the server
17 was depicted as being attached to a network (See Wiegel Fig. 1).

18 Claim 12 is rejected for the same reasons as claim 1 above and further because the system
19 used software to implement the functionality (See Even Paragraph 0058).

20 Claim 13 is rejected for the same reasons as claims 1-3 above.

21 Regarding claims 14-17, Wiegel and Even disclosed that said stream transport
22 management module specifies the first or second interface in accordance with a network address

Art Unit: 2131

1 of the first or second network received from the first or second client apparatus via the first or
2 second path (See Even Paragraphs 0026 and 0028-0030).

3 Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination
4 of Wiegel and Even as applied to claim 1 above, and further in view of Day et al. (US Patent
5 Number 5,996,025) hereinafter referred to as Day.

6 The combination of Wiegel and Even disclosed a stream transport processing unit for
7 executing stream data distribution to the client apparatus based upon one stream data distribution
8 protocol (See Even Paragraph 0017) but failed to disclose a bandwidth management processing
9 unit in the server for executing bandwidth control communication based on a control program for
10 controlling a bandwidth of the stream data distribution.

11 Day teaches that in a streaming system, in order to ensure quality of service to the
12 connected clients a bandwidth manager should be employed in the server (See Day Col. 2 Lines
13 62-66).

14 It would have been obvious to the ordinary person skilled in the art at the time of
15 invention to employ the teachings of Day in the server system of Wiegel, and Even by providing
16 bandwidth management at the server. This would have been obvious because the ordinary
17 person skilled in the art would have been motivated to optimize server resource use without
18 degrading the services already in progress.

19 ***Conclusion***

20 Claims 1-17 have been rejected.

Art Unit: 2131

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Matthew Henning
Assistant Examiner
Art Unit 2131
4/19/2006

CHRISTOPHER REVAK
PRIMARY EXAMINER

CR 4/20/06